

April 26, 2012

Ms. Judith Enck
Regional Administrator
United States Environmental Protection Agency, Region 2
290 Broadway; 26th Floor
New York, NY 10007-1866



RE: Notification and Certification of a Self-Implementing Cleanup for the Hatco Co-located PCB Impacts
Former Nuodex Corporation Site, NJDEP PI No. G000001659

Dear Ms. Enck:

Based on our March 28, 2012 discussions and as a follow-up to the November 23, 2011 technical memorandum, EPEC Polymers, Inc. (EPEC) is providing this notification and certification letter to inform the United States Environmental Protection Agency (USEPA) of its intent to conduct a Self-Implementing Cleanup of polychlorinated biphenyl (PCB)-impacted material sourced from the adjacent Hatco Site that is co-located with lead-impacted material (lead impacted area) being remediated by EPEC at the former Nuodex Corporation Site (Site; PI No. G000001659). The PCB-impacted material sourced from the adjacent Hatco Site remains the responsibility of Weston Solutions (Weston) however portions of the PCBs co-located with the lead impacts are being remediated by EPEC to facilitate schedule demands associated with Nuodex Site remediation activities. The lead-impacted material is being remediated in accordance with an approved New Jersey Department of Environmental Protection (NJDEP) *Remedial Action Workplan* (RAWP) prepared by Brown & Caldwell (B&C) dated December 13, 2010. Remedial activities within the lead-impacted area have been initiated however no excavated materials, with the exception of the PCB impacted materials that are under Weston's control (as described below), have been removed from or disposed of off-site.

With this notification and certification letter, EPEC is requesting USEPA's approval for the following:

- 1) Conducting the Self-Implementing Cleanup of PCBs at the Site in accordance with Title 40 of the Code of Federal Regulations (CFR) Part 761.61 and as subsequently described in this Cleanup Work Plan (CWP);
- 2) Bottom excavation confirmation sampling for PCBs (excluding the PCB area defined by a greater than [$>$] 50 part per million [ppm] PCB concentration, which is being sampled by Weston under agreement with EPEC, per Weston's approved PCB work plan[s]) in accordance with 40 CFR 761.61. As discussed during our March 28, 2012 communications, the proposed frequency for bottom samples is one (1) PCB soil sample for every 625 square feet which is a variance to Subpart O (Sections 761.280 to 761.298).
- 3) Sidewall excavation confirmation sampling in accordance with the New Jersey Technical Requirements for Site Remediation (TRSR) for post-remediation sampling (N.J.A.C. 7:26E-6.4) in which one PCB soil sample will be collected every 30 linear feet on each sidewall of the excavation;



4) Alternate decontamination and sampling methodology under 40 CFR 761.79(h) for equipment used for remediating PCBs;

5) Management and disposal of PCB-impacted materials at concentrations >1 ppm and less than (<) 50 ppm as defined by a Risk-Based Disposal Approval under 40 CFR 761.61(c) in which PCB-impacted material can be disposed of off-site as a “non”-Toxic Substances Control Act (TSCA) waste to a USEPA-approved chemical waste landfill(s); and,

6) Management and disposal of water that accumulates in the excavation and/or the temporary soil management area (SMA), as well as from equipment decontamination efforts, will be collected, pumped into a poly tank for temporary storage and subsequently transported to the permitted temporary on-site water treatment system for treatment. The treated water will be sampled in accordance with permit requirements (maximum PCB concentration for water discharge is <3 ppm) and subsequently discharged to the Middlesex County Utilities Authority (MCUA) - Publicly-Owned Treatment Works (POTW) under the approved NJDEP and MCUA permit(s). Solids generated by the temporary on-site water treatment system will be analyzed for PCBs. Based on the results of the PCB analyses solids will be managed and disposed of in accordance with requirements defined in Item 5 above if PCBs are >1 ppm and <50 ppm. If PCBs are <1 ppm, solids may be disposed of on-site or off-site in accordance with local, state and Federal regulations as they apply to other the potential constituents of concern within the solids.

The following sections provide the specific information and requirements for requesting approval for the PCB remediation under the Self Implementing Cleanup Rule as defined in 40 CFR 761.61(a).

40 CFR 761.61 (a)(3)(i)(A) Nature of Contamination

PCB impacts, as a result of the adjacent Hatco Site historic operations, reside in soil that is also impacted with lead at the former Nuodex Site. The lead impacted area and co-located PCB-impacted material are situated on the former eastern bank of Hartman’s Pond in the northern one-third portion of the Site as illustrated on Figure 1. This area, for which notification and certification of Self-Implementing Cleanup for PCBs is required, is approximately 32,000 square feet (sf). The larger portion (approximately 20,000 sf) of the impacted area is on the berm while the smaller portion (approximately 12,000 sf) lies within the adjacent wetland. The lead-impacted fill materials were found to be concentrated at the surface of the berm and, at some locations, extending to depths of approximately 3- to 4-feet below ground surface (bgs). The PCBs have been similarly encountered at depths of up to 3- to 4-feet bgs.

40 CFR 761.61 (a)(3)(i)(B) PCB Pre-Cleanup Characterization Data

Pre-cleanup characterization of the Hatco PCBs co-located with the lead-impacted soils has previously been conducted by Weston, as well as separately by B&C and USA Environment, LLP (USA) on behalf of EPEC. PCB pre-cleanup soil samples were collected by B&C and Weston from December 1998 to September 2009 in the lead impacted area and in the adjacent northeastern wetlands. Most recently in 2012, USA has collected PCB pre-cleanup soil samples in the lead impacted area immediately prior to initiating the remedial activities. Results of these pre-cleanup characterization activities are summarized in Tables 1 and 2, and illustrated on Figures 2 and 3. As illustrated on the figures, the extent and magnitude of PCBs are defined in relationship to the predetermined extent of the lead impacts.

As illustrated on the figures, the eastern limit of the lead impacts has been delineated and defined in the NJDEP approved RAWP. This limit defines the extent of excavation for lead impacts associated with the lead berm area. Known PCB-impacts extend beyond the eastern limits of the lead impacted area excavation into the adjacent wetlands, however these are being managed separately by Weston as part

of their PCB delineation and remediation project on EPEC property (Weston is conducting this work under their USEPA approved work plan[s]). Therefore remediation of those PCB impacts are excluded from the scope of work defined herein as part of this notification and certification letter. In addition, an area of approximately 20-feet by 30-feet (600 sf) by 1-foot deep exists in the lead impacted area with soils exhibiting PCB concentrations >50 ppm. These soils are being excavated by USA and temporarily placed in a SMA constructed on the Northern Landfill of the former Nuodex Site for subsequent management and disposal at an off-site disposal facility by Weston (Figure 1). Hence, the management, sampling and off-site disposal of the >50 ppm PCB-impacted material is excluded from this cleanup plan and associated self-implementation notification and certification letter.

40 CFR 761.61 (a)(3)(i)(C) PCB Pre-Cleanup Characterization Location and Extent

As described above, pre-cleanup characterization of the PCBs co-located with the lead-impacted soils has previously been conducted. The location and extent of the identified PCB impacts from the previous investigations are summarized in Tables 1 and 2, and illustrated on Figures 2 and 3. Figure 4 illustrates the PCB sample locations and designations including the surface topography in the area of the PCB impacts.

40 CFR 761.61 (a)(3)(i)(D) PCB Cleanup Work Plan and Schedule

This section presents the proposed CWP and schedule (Figure 6) for conducting the PCB remediation activities concurrent with the lead-impacted material removal activities. The lead-impacted material removal activities are being conducted in accordance with the NJDEP approved RAWP. In general, the remedial activities for both PCB and lead impacted materials being conducted include excavating the impacted materials, placing the excavated materials in a temporary SMA for subsequent management and off-site disposal at a permitted and approved disposal facility. A summary of the types and estimated quantities of co-located lead and PCB impacted materials as well as the proposed management of these materials are presented in Table 3 and are briefly described below.

The lead impacted area consists of lead-impacted fill material containing battery casings and slag, and/or lead at a concentration >800 ppm, which is the New Jersey non-residential direct contact soil remediation standard (NRDCSRS), as well as at concentrations above the Site-specific Remedial Action Criteria (RAC) of 21,000 ppm. The RAC material will be disposed of at an off-site disposal facility while the material that exhibits lead concentrations between 800 ppm and 21,000 ppm (and PCBs <1 ppm which is the NRDCSRS) will be consolidated within the hydraulic barrier wall alignment (beneath the future soil cover).

The PCB material includes an area referred to as the PCB "hot-spot" (refer to the blue hatching area illustrated on Figure 2) that consists of PCB concentrations >50 ppm. The maximum concentration of PCBs detected and co-located with lead impacted material is 74 ppm at sample location BW-56. Further, soils with PCB concentrations >1 ppm are co-located throughout the lead impacted soils. Because of the nature of the PCB "hot spot" material, the PCB "hot spot" area will be isolated from the other excavation areas, excavated, and placed in a unique stockpile in the SMA on top of the Northern Landfill for subsequent management and off-site transportation and disposal (T&D) by Weston (Weston will conduct this work under their work plan[s]).

The proposed specific means and methods for implementing the activities (some of the activities have been initiated and/or completed as described below) associated with the excavation and disposal of the lead-containing and/or PCB-containing materials from the lead impacted area include the following:

1. Acquired permits associated with excavating the lead impacted area. Performed New Jersey One-call to clear subsurface utilities within the excavation area.
2. Implemented appropriate health and safety protocols in accordance with the Site-specific Health and Safety Plan (HASP). These requirements included the establishment of exclusion zones, decontamination areas for personnel and equipment and other pertinent elements defined in the Site-specific HASP.
3. Constructed, placed and continue to maintain temporary sediment controls and engineering controls associated with the lead impacted area in accordance with and as presented in the approved Phase 1 SESC Plan.
4. Staked the limits of the lead-impacted excavation areas (and co-located PCB-impacted areas) as shown on the associated figures as well as the adjacent wetlands. Established AOC-specific survey benchmarks and several boundary control survey points and tied these points to the Site-specific survey coordinate system.

Additionally, key survey points (the limits of the impacted areas as well as the confirmation sampling locations were surveyed) will be established along the perimeter boundary of the 800 ppm lead excavation cut (green hatched area illustrated on Figure 2) and PCB "hot spot" area (Blue hatched area illustrated on Figure 2). Care was taken to stake and clearly cord off the PCB "hot spot" to ensure this area was not disturbed until appropriate management protocols were in place.

5. Conducted pre-cleanup PCB soil delineation in the lead impacted areas where the horizontal and/or vertical extent were not adequately defined (i.e., areas outside and/or below the PCB "hot-spot" and the area with lead concentrations >21,000 ppm illustrated on Figure 2). The majority of the areas requiring further PCB soil delineation were on top of the berm. PCBs are well delineated within the adjacent wetlands outside and/or below the lead-impacted soils >21,000 ppm. The results of the pre-cleanup PCB soil delineation characterization were presented previously.
6. Constructed a single 200-foot by 200-foot SMA on top of the Northern Landfill (Figure 4) to manage the lead- and PCB-impacted materials in various stockpiles as defined previously. Four (4) individual stockpiles were constructed and will be separately managed within the SMA. The estimated quantities of the materials to be managed in the segregated stockpiles within the SMA are presented in Table 3. Materials from the lead impacted area excavation is currently being placed and managed within the SMA. As illustrated on the figure, these four (4) stockpiles include:

1) SMA-1: SMA-1 area will include:

- a. Known PCB-impacted materials (PCB "hot spot" soils) >50 ppm. Material within this stockpile will be managed and disposed of in accordance with 40 CFR 761.61.
- b. Any concentration lead that will be excavated separately from other lead-impacted, or PCB <50 ppm-impacted material excavation activities;

2) SMA-2: SMA-2 area will include:

- a. Known lead-impacted materials with slag and/or battery casings or soil with lead at concentrations >21,000 ppm and PCB concentrations <50 ppm. This material will be subsequently disposed of off-site at an approved disposal facility once the moisture content of the soils is adequately reduced;

- 3) SMA-3: SMA-3 area will include:
 - a. Materials with lead impacts >800 ppm and <21,000 ppm co-located with known PCB impacts >1 ppm - (defined by a 10-feet by 10-feet area approximately 1-foot deep at locations that PCBs have been previously detected as well as beneath the PCB "hot spot" area).
 - b. Additional PCB impacted areas may require excavation based on the verification and/or confirmation sampling activities to be implemented during excavation activities; and,
- 4) SMA-4: SMA-4 area will include:
 - a. Temporary placement of saturated soils for subsequent disposal on-site, or off-site, depending upon the contents of the material. This area will be constructed in a manner to drain and manage water from the soils as illustrated on Figure 4. Water management is further described below.

During the excavation operations, primarily during the excavation activities within the wetlands, a daily inspection of active SESC devices must be conducted as described in the SESC Plan. While excavating in the wetlands, portions of the excavation effort will require digging and removal of wet/saturated material. During excavation, the majority of free water will be allowed to drain through the use of a perforated excavator bucket. The remaining saturated material will then be transported to the SMA for further moisture reduction.

The temporary stockpile locations for the excavated material will be pre-determined prior to placing the materials in one of the four stockpiles within the SMA (Figure 4). Each stockpile will be appropriately labeled and adequately separated to minimize potential co-mingling of the various stockpiled materials. The SMA will be surrounded with a 3-feet-high berm pitched to one corner where a sump area will be created and an interim trash pump installed to collect residual soil fluids (water will be pumped into a container [i.e., poly-tank] for subsequent treatment. This water will be channeled to the eastern side of the SMA where it may pass through sediment removal devices, including, but not limited to, silt fence, hay bales, check dams, etc. prior to entry into the sump.

During the recent remedial activities in the lead berm area (April 6, 2012), a water sample was collected from standing water in the western portion of the excavation and the sample was subsequently analyzed for PCBs. PCB analytical results from this sample are presented below.

Analyzed Constituent	Analyzed Value (µg/l) ⁽²⁾
Aroclor 1016	<0.098 ⁽¹⁾
Aroclor 1221	<0.49 ⁽¹⁾
Aroclor 1232	<0.41 ⁽¹⁾
Aroclor 1242	<0.17 ⁽¹⁾
Aroclor 1248	<0.16 ⁽¹⁾
Aroclor 1254	<0.11 ⁽¹⁾
Aroclor 1260	<0.12 ⁽¹⁾

Notes:

- 1) The listed value reflects the Method Detection Limit (MDL) for each aroclor.
- 2) The PCB limit is based on TSCA unrestricted use criteria/Maximum Contaminant Level 0.5 µg/l.

Based on the results of the recent PCB water sample, EPEC proposes to capture water from the excavation, SMA and decontamination activities in a poly tank, and then transport and treat the water using the permitted temporary on-site water treatment system. The treated water will be tested in accordance with the approved MCUA discharge permit requirements (PCB water discharge criteria to be met is <3 ppm) to verify the water meets discharge criteria. The water that is verified clean will subsequently be discharged to the MCUA - POTW.

Solids generated by the temporary on-site water treatment system will be analyzed for PCBs. Based on the results of the PCB analyses solids will be managed and disposed of in accordance with requirements defined for PCB impacted soils at a concentration of >1 ppm and <50 ppm. If PCBs are <1 ppm, solids may be disposed of on-site or off-site in accordance with local, state and Federal regulations that may apply to other potential constituents of concern within the solids.

Excavation activities within the lead impacted area are proposed as follows:

7. Initial 0.5-foot Excavation (known lead impacted materials >21,000 ppm and/or visual slag and/or battery casings): The initial excavation of the top 0.5-feet of lead-impacted materials (as well as PCB-impacted material at concentrations <50 ppm that is co-located with the lead-impacted material) has been conducted in the adjacent wetlands and lead impacted area to the extents previously staked in the field and as illustrated on Figure 2. Excavation of these materials was completed in the northeastern wetlands both north and south of the PCB "hot spot" and progressed to the west onto the berm. Based on the previous lead soil data (red hatching illustrated on Figure 2), soils with lead concentrations >21,000 ppm appeared to occur primarily in the initial 0- to 0.5-feet bgs however once excavation was initiated, visual lead slag requiring excavation extended to approximately 2-feet bgs.

As described above, the adjacent wetlands material was excavated first (both north and south of the PCB "hot spot") using a long-reach excavator fitted with a bucket with perforated drain holes. During the excavation activities within the wetlands, a daily inspection of the active SESC devices was conducted as described in the SESC Plan. During the excavation, the majority of free water was allowed to drain through the use of a perforated excavator bucket. The remaining saturated material were then placed in off-road 25-ton articulating dump trucks, transported to stockpile area SMA-2 in the SMA and placed in stockpiles to allow the soil to drain. Pore-water that drains from the soil is captured in the low point surface-water collection sump and managed as described previously.

Once the wetlands materials were excavated, the excavation activities progressed to the west onto the slopes and top of the berm. The dry materials on the slopes or on top of the berm outside of the wetlands were excavated with a long-reach excavator, mini-excavator and/or front end loader. Excavated material was loaded into off-road 25-ton articulating dump trucks for subsequent transport to the SMA on the Northern Landfill and placed in a separate stockpile (SMA-2) for subsequent off-site disposal at the pre-authorized disposal facility. The anticipated off-site disposal facility selected for the disposal of this lead-impacted material (with PCBs at concentrations < 50 ppm) is a hazardous waste management facility, PSC's – Republic Environmental Systems, Inc. Landfill, located in Hatfield, Pennsylvania.

Confirmation sampling of the vertical extent of the lead impacted area excavation (confirmation sampling has been initiated in the wetlands concurrent with the excavation activities occurring in the dry material) was initiated after the visual inspection of the fill containing battery casings and/or slag was removed. Soil sampling and lead analysis from discrete samples were collected

in accordance with the NJ TRSR for post-remediation sampling (N.J.A.C. 7:26E-6.4) [i.e., one sample collected for every 900 square feet of excavation plus one sample collected for every 30 linear feet of each excavation sidewall] to confirm the materials are below the applicable RAC (lead <21,000 ppm). EPEC is awaiting laboratory analytical results for lead.

The location of each sample node was surveyed by the Site surveyor and tied into the Site's existing coordinate NAD83 system. Wood stakes or orange spray paint will be used to define those grid-node locations where lead concentrations continue to exceed 21,000 ppm, if present. These marked areas may be further refined with additional discrete soil samples for lead using a higher density grid to define the limits of the residual soil >21,000 ppm. An additional 0.5-foot layer of impacted soil (lead concentrations >21,000 ppm) will be excavated in these areas to the defined limits. At this point, the entire area should be clear of lead-impacted soils with concentrations > 21,000 ppm and/or visual evidence of battery casings and/or slag.

Depending on the depth of excavation of the lead-impacts >21,000 ppm, additional investigative PCB samples may be collected from locations that have exhibited elevated PCB concentrations as defined during the PCB pre-cleanup soil characterization efforts described above. These PCB samples will be collected from the same location of the elevated concentration previously identified and, if PCBs are detected at concentrations >1 ppm, the location will require excavation in accordance with the protocols defined in Item 9 below. The soil samples will then be analyzed for PCB in accordance with USEPA's Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) - Method 8082.

8. PCB "hot spot" Removal: EPEC conducted the focused excavation of the PCB "hot spot" that exhibits concentrations >50 ppm and temporarily placed this material in the SMA for subsequent management and disposal by Weston. The previous PCB sample results identified this elevated PCB "hot spot" (>50 ppm) in lead impacted area, mostly in the adjacent wetlands. The PCB "hot spot" was identified during previous investigations and is located at prior sample points CDG-232 and BW-56 as illustrated on Figure 2. The extent of the PCB "hot spot" is bound to the west by the limit of encroachment of the wetlands up against the Lead Berm; to the south by a location approximately halfway between PCB sample location BW-Y and CDG-22; and to the north by a location halfway between CDG-223 and BW-56. The PCB "hot spot" area required excavation to a depth of 0.5 feet and was estimated to contain approximately 14 cubic yards of impacted soil.

This material was excavated with a long-reach excavator fitted with a bucket with perforated drain holes. The saturated material was then placed in off-road 25-ton articulating dump trucks, and transported to stockpile area SMA-1 in the SMA located on top of the Northern Landfill. Once the PCB "hot spot" materials was placed in Stockpile SMA-1, the excess pore-water was allowed to drain in a controlled manner to the surface water collection sump. Material within this stockpile will be managed and disposed of in accordance with 40 CFR 761.61. This material is awaiting management and coordination for T&D by Weston.

Subsequent to the excavation of the PCB "hot spot", PCB confirmation soil samples were collected by Weston to confirm that PCB-impacted materials were removed to concentrations <50 ppm. As described previously, confirmation PCB soil samples were collected by Weston as necessary, to comply with the BOTTOM excavation confirmation sampling for PCBs in accordance with the 40 CFR 761.61 and/or, as agreed upon between USEPA and Weston, based on 40 CFR 761 Subpart O (Sections 761.280 to 761.298). Further, Weston was also required to

collect SIDEWALL excavation confirmation sampling in accordance with the TRSR for post-remediation sampling (N.J.A.C. 7:26E-6.4) in which one (1) PCB soil sample will be collected on each side at a minimum of every 30 linear feet along the sidewall. The soil samples were then analyzed for PCB accordance with USEPA SW-846 - Method 8082. The PCB analytical results from the post-excavation confirmation sampling exhibited that PCB concentrations in the soil were <50ppm.

9. Known PCB-Impacted Areas >1 ppm and <50 ppm: Subsequent to excavating the known lead impacted materials >21,000 ppm and/or with visual slag and/or battery casings (red hatching illustrated on Figure 2), known impacted areas with PCB concentrations >1 ppm not removed as part of the previous step will be excavated (anticipated excavation locations include sample points BW-5, CDG_196, EB-5, CDG-223 and the PCB-impacted materials beneath the PCB "hot spot" area illustrated on Figure 2). PCB materials >1 ppm and <50 ppm beneath the PCB "hot spot" will be excavated and confirmation samples collected subsequent to implementing the PCB "hot spot" excavation activities as described below. As described previously, each of these areas will be excavated 1-foot in a 10-foot by 10-foot grid (as well as soils beneath the entire pre-defined PCB "hot spot" area) and placed in a separate stockpile (SMA-3) in the SMA on the Northern Landfill for subsequent off-site disposal.

Once the moisture within the stockpiled materials is reduced as appropriate, the material will subsequently be loaded into haul trucks for off-site disposal. The anticipated off-site disposal facility selected for the disposal of the PCBs at concentrations >1 ppm but <50 ppm with lead concentrations <21,000 ppm is the hazardous waste management facility, PSC's – Republic Environmental Systems, Inc. Landfill, located in Hatfield, Pennsylvania. This material will be characterized and manifested as well as a written notification (at least 15 days before the first shipment) of the quantity to be shipped and the highest concentration of PCBs will be provided to the USEPA in accordance with 761.61(a)(5)(B).

Post-excavation confirmation sampling for PCBs in these areas will be performed for each location and will be conducted as follows:

- 1) BOTTOM excavation confirmation sampling will be collected in accordance with the 40 CFR 761.61 and a variance to Subpart O (Sections 761.280 to 761.298) which would require one (1) soil sample for every 625 square feet. In general, a square-based grid system (25-feet by 25-feet) will be overlaid in the excavation area with the grid axis oriented on a magnetic north-south line centered in the area of excavation (Figure 5). One discrete soil sample will be collected from each grid and analyzed for PCBs.
- 2) SIDEWALL excavation confirmation samples will be collected in accordance with the NJ TRSR for post-remediation sampling (N.J.A.C. 7:26E-6.4) which requires one (1) sample collected every 30 linear feet of each excavation sidewall.

The soil samples will then be analyzed for PCB accordance with USEPA SW-846 - Method 8082. Once the PCB concentrations >1 ppm are excavated and confirmed clean (as well as Item 9 below, the PCB "hot spot") in the entire lead impacted area, the focus of the additional excavation will be based solely on residual lead impacts.

10. Once the lead impacted area is cleared for PCBs and lead based on post-remediation confirmation sampling as well as water that has accumulated in the excavation is dewatered and subsequently treated/discharged to the MCUA, backfilling can be implemented. The lead

impacted area will backfilled and compacted with approved fill material (in accordance with the Material Acceptance Plan [MAP]) if outside the proposed hydraulic barrier wall working platform footprint or with MAP-approved working platform material if within the hydraulic barrier wall working platform footprint. The wetlands area that has been excavated will be backfilled with approved Planting Media to the pre-existing grades. The Planting Media will in general be a sandy loam material that meets the requirements of the MAP prior to acceptance for use at the Site.

11. Conduct "in-place" mitigation by replanting the wetlands area with wetland tolerant plants (refer to the NJDEP Land Use Regulation Program Multi-Permit Application: Volume I of III: Report Text, Specifications).
12. Subsequent to the completion of the PCB remedial activities in the lead impacted area, EPEC will decontaminate the excavation and loading equipment used during the remediation in accordance with 40 CFR 761.79(h). Decontamination will occur within the SMA to ensure water generated during the moisture reduction and/or decontamination process is appropriately captured and managed on-site as described previously. The selected decontamination procedure to be used will follow the protocols defined in 40 CFR 761.79(b) to attain the standard of 10 micrograms per 100 square centimeters as stated in 761.79(b)(3)(1)(A) using the wipe test requirements described in 761.123.

In general, equipment used during remedial activities will be decontaminated using CAPSUR or a USEPA approved equivalent cleaning agent, a PCB decontamination solution product manufactured by Integrated Chemistries, Inc. CAPSUR or USEPA approved equivalent will be used to wash the heavy equipment and, where necessary, sampling equipment and other non-disposables in accordance with manufacturer directions. Washing will be followed by a rinse stated consisting of a high-pressure, hot-water power-wash. The heated water will primarily be removing any potential oily residue that may remain from contact with the soil. These activities will be conducted in the SMA to ensure the wash water is appropriately contained, managed and disposed of as described previously.

After the decontamination wash/rinses, wipe samples (over a 100 square centimeter center area) will be collected from surfaces of the equipment to provide a representative residual PCB concentration. A wipe sample will consist of at least one (1) sample collected from each unique portion of the equipment (bucket/dump beds) that was in contact with impacted soil. An additional sample may be collected from another unique surface of the equipment where there is the potential for particulate accumulation.

13. Prepare **Close-Out Documents** to memorialize the as-constructed conditions upon completion of the Lead Berm excavation. In accordance with the RAW and pertinent close-out documentation, successful outcome for remediation associated with the lead-impacted berm (co-located with PCB impacts) will include removal and disposal of materials containing: 1) soils with lead concentrations >21,000 ppm and/or battery casings and slag and/or lead anywhere within the Lead Berm area; 2) soils with lead concentrations >800 ppm outside the hydraulic barrier wall; and, 3) soils with PCBs >1 ppm anywhere within the lead impacted area.
14. Records and Certification: At the completion of the cleanup, EPEC along with a New Jersey Registered Professional Engineer (as provided by USA Environment, LP) will provide documentation and certification consistent with 40 CFR 761.125 to the USEPA that the PCB (PCBs >1 ppm and <50 ppm) remedial activities and final closure have been completed in accordance with the approved CWP, as described herein.

40 CFR 761.61 (a)(6) Cleanup Verification

As described previously and to satisfy the PCB Self-Implementing Cleanup requirements, post-excavation confirmation sampling for PCBs <50 ppm in the lead impacted area will be performed by EPEC. Essentially, PCB soil confirmation sampling for each location will be conducted as follows:

- 1) BOTTOM excavation confirmation sampling will be collected at one (1) soil sample for every 625 square feet. In general, a 25-foot square-based grid system will be overlaid in the excavation area with the grid axis oriented on a magnetic north-south line centered in the area of excavation (Figure 5). One discrete soil sample will be collected from each grid point and analyzed for PCBs.
- 2) SIDEWALL excavation confirmation samples will be collected at one (1) sample collected every 30 linear feet of each excavation sidewall.

The soil samples will then be analyzed for PCB accordance with USEPA's SW-846 Method 8082.

40 CFR 761.61 (a)(3)(i)(E) Written Certification

A written certification in accordance with 40 CFR 761.61 (a)(3)(i)(E) is provided in Attachment A.

On behalf of EPEC Polymers, Inc., I appreciate your assistance and timely approval of this notification and certification to conduct a Self-Implementing Cleanup of PCB-impacted material at the former Nuodex Site. Should you have questions or requirement additional information associated with this letter, please contact me at

Sincerely,



Project Manager
Robert M. Cornez

Attachments

cc: Dr. James S. Haklar, Ph.D., P.E., Sr. – United States Environmental Protection Agency, Region 2

Mr. Dennis Green – New Jersey Middlesex/Union County Public Health Department

Attachment A
Written Certification Statement

40 CFR 761.61 (a)(3)(i)(E) Written Certification

In accordance with 40 CFR 761.61 (a)(3)(i)(E), EPEC is providing the following written certification:

On behalf of EPEC Polymers, Inc., Robert M. Cornez, a representative of EPEC Polymers, Inc. who is the owner of the property in reference, certifies that the requirements of this letter and CWP will be implemented by USA Environment LLP (USA), EPEC's remediation contractor, to remediate the PCB-impacted materials co-located in the lead impacted area at the former Nuodex Site. USA, will ensure that the sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the former Nuodex site are on file at the Site trailer located at 1070 Riverside Drive; Keasbey, NJ 08832 and are available for United States Environmental Agency (USEPA) inspection. Further, the certifications to the variations for the PCB remediation at the former Nuodex site under the self-implementing rules will also be retained and made available to the USEPA as required.

Date: 26-Apr-12

Signed by: Robert M. Cornez

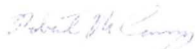
Signature: 

Table 1
Summary of Historic PCB Sampling and Analytical Results
Lead Berm Area with Hatco Co-Located PCBs
Former Nuodex Corporation Site

Sample Location Designation	Sample Date	Analysis Date	Sample Begin Depth (feet bgs)	Sample End Depth (feet bgs)	Total PCB Concentration (PPM)	Easting Coordinate	Northing Coordinate	Elevation (feet bgs)	Notes
BW-56	9/12/2011	9/15/2011	1	1.5	1.8	542593.013	613042.105	6.62	Standing Water
BW-56_SE	9/12/2011	9/15/2011	0	0.5	5.8	542598.044	613043.546		
BW-56_SN	9/12/2011	9/15/2011	0	0.5	0.24	542589.83	613048.149		
BW-56_SS	9/12/2011	9/15/2011	0	0.5	21	542595.092	613037.751		
BW-56_SW	9/12/2011	9/16/2011	0	0.5	100	542589.042	613039.566		
BW-56_SW	9/12/2011	9/19/2011	1	1.5	0.97	542589.042	613039.566		
CDG_109	3/24/2011	4/6/2011	0	0.5	0	542472.433	613385.522		
CDG_110	3/24/2011	4/12/2011	2	2.5	0	542532.852	613378.916		
CDG_110	3/24/2011	4/6/2011	0	0.5	3.5	542532.852	613378.916		
CDG_111	3/24/2011	4/6/2011	0	0.5	1.2	542559.448	613381.124		
CDG_111	3/24/2011	4/12/2011	2	2.5	0	542559.448	613381.124		
CDG_112	3/24/2011	4/12/2011	2	2.5	0	542617.949	613388.192		
CDG_112	3/24/2011	4/6/2011	0	0.5	3.9	542617.949	613388.192		
CDG_118	3/24/2011	4/6/2011	0	0.5	0	542495.197	613360.708		
CDG_119	3/24/2011	4/6/2011	0	0.5	2.4	542538.409	613362.635		
CDG_119	3/24/2011	4/12/2011	2	2.5	0	542538.409	613362.635		
CDG_120	3/24/2011	4/6/2011	0	0.5	9.7	542557.137	613361.35		
CDG_120	3/24/2011	4/8/2011	2	2.5	0.089	542557.137	613361.35		
CDG_121	3/24/2011	4/6/2011	0	0.5	0.63	542588.678	613356.428		
CDG_122	3/29/2011	4/6/2011	0	0.5	0	542622.427	613351.596		
CDG_128	3/29/2011	4/6/2011	0	0.5	0	542501.925	613316.731		
CDG_129	3/29/2011	4/6/2011	0	0.5	0.4	542530.682	613327.38		
CDG_139	3/29/2011	4/6/2011	0	0.5	0	542502.076	613289.343		
CDG_14	3/7/2011	3/23/2011	2	2.5	0	542767.183	613708.307		
CDG_14	3/7/2011	3/15/2011	0	0.5	0.91	542767.183	613708.307		
CDG_140	3/29/2011	4/6/2011	0	0.5	0.032	542533.265	613295.325		
CDG_143	3/30/2011	4/5/2011	0	0.5	9.3	542608.427	613298.447		
CDG_152	3/30/2011	4/4/2011	0	0.5	0.031	542532.559	613266.143		
CDG_153	3/30/2011	4/4/2011	0	0.5	0.35	542564.378	613263.125		
CDG_156	4/4/2011	4/14/2011	2	2.5	0.391	542645.786	613264.94		
CDG_156	4/4/2011	4/10/2011	0	0.5	4	542645.786	613264.94		
CDG_157	4/4/2011	4/10/2011	0	0.5	0.12	542684.17	613275.895		
CDG_158	4/4/2011	4/14/2011	2	2.5	0	542706.718	613267.725		
CDG_158	4/4/2011	4/10/2011	0	0.5	1.2	542706.718	613267.725		
CDG_164	3/30/2011	4/4/2011	0	0.5	0.16	542532.091	613230.891		
CDG_165	3/30/2011	4/4/2011	0	0.5	0	542560.427	613234.23		
CDG_166	4/1/2011	4/21/2011	2	2.5	0.088	542587.626	613229.77		
CDG_166	4/1/2011	4/10/2011	0	0.5	4.4	542587.626	613229.77		
CDG_170	4/6/2011	4/26/2011	2	2.5	26	542720.04	613232.987		
CDG_170	4/6/2011	4/26/2011	3.5	4	2	542720.04	613232.987		
CDG_170	4/6/2011	4/15/2011	0	0.5	6.8	542720.04	613232.987		
CDG_175	4/1/2011	4/21/2011	2	2.5	0	542528.036	613205.733		
CDG_175	4/1/2011	4/10/2011	0	0.5	0.65	542528.036	613205.733		
CDG_176	4/1/2011	4/9/2011	0	0.5	0.65	542567.034	613204.526		
CDG_177	4/1/2011	4/21/2011	2	2.5	0.048	542582.181	613210.233		
CDG_177	4/1/2011	4/10/2011	0	0.5	19	542582.181	613210.233		
CDG_178	4/1/2011	4/21/2011	2	2.5	0.058	542618.212	613212.49		
CDG_178	4/1/2011	4/10/2011	0	0.5	37	542618.212	613212.49		
CDG_186	4/1/2011	4/21/2011	2	2.5	0	542530.906	613175.186		
CDG_186	4/1/2011	4/10/2011	0	0.5	0.62	542530.906	613175.186		
CDG_187	4/1/2011	4/10/2011	0	0.5	0	542567.206	613176.351		
CDG_188	4/1/2011	4/9/2011	0	0.5	0.41	542595.187	613165.032		
CDG_189	4/1/2011	4/18/2011	2	2.5	0.67	542625.105	613164.042		
CDG_189	4/1/2011	4/10/2011	0	0.5	4.7	542625.105	613164.042		
CDG_196	4/4/2011	4/10/2011	0	0.5	0.96	542563.594	613145.515		
CDG_196	4/4/2011	4/14/2011	2	2.5	1.03	542563.594	613145.515		
CDG_196	4/4/2011	4/21/2011	3.5	4	0.36	542563.594	613145.515		
CDG_197	4/12/2011	4/27/2011	3.5	4	0.49	542587.406	613149.642		
CDG_197	4/12/2011	4/19/2011	0	0.5	11	542587.406	613149.642		
CDG_197	4/12/2011	4/27/2011	2	2.5	1.4	542587.406	613149.642		
CDG_198	4/12/2011	4/27/2011	2	2.5	0.35	542611.117	613143.541		
CDG_198	4/12/2011	4/17/2011	0	0.5	2.4	542611.117	613143.541		
CDG_205	4/11/2011	4/15/2011	0	0.5	0.67	542557.496	613111.17		

Table 1
Summary of Historic PCB Sampling and Analytical Results
Lead Berm Area with Hatco Co-Located PCBs
Former Nuodex Corporation Site

Sample Location Designation	Sample Date	Analysis Date	Sample Begin Depth (feet bgs)	Sample End Depth (feet bgs)	Total PCB Concentration (PPM)	Easting Coordinate	Northing Coordinate	Elevation (feet bgs)	Notes
CDG_206	4/12/2011	4/27/2011	3.5	4	0.44	542589.1811	613112.4212		
CDG_206	4/12/2011	4/19/2011	0	0.5	21	542589.1811	613112.4212		
CDG_206	4/12/2011	4/27/2011	2	2.5	1.8	542589.1811	613112.4212		
CDG_207	4/12/2011	4/27/2011	3.5	4	3.9	542619.181	613112.4716		
CDG_207	4/12/2011	4/27/2011	2	2.5	4.3	542619.181	613112.4716		
CDG_207	4/12/2011	4/17/2011	0	0.5	5.8	542619.181	613112.4716		
CDG_214	4/11/2011	4/15/2011	0	0.5	1	542562.006	613086.067		
CDG_214	4/11/2011	4/25/2011	2	2.5	0.025	542562.006	613086.067		
CDG_223	4/11/2011	4/25/2011	2	2.5	0.52	542573.04	613061.556		
CDG_223	4/11/2011	4/15/2011	0	0.5	2	542573.04	613061.556		
CDG_224	4/12/2011	4/17/2011	0	0.5	7.2	542589.2819	613052.4213		
CDG_232	9/12/2011	9/15/2011	1	1.5	1.4	542586.952	613032.634		
CDG_232	4/12/2011	4/27/2011	2	2.5	1.6	542586.952	613032.634		
CDG_232	4/12/2011	4/19/2011	0	0.5	110	542586.952	613032.634		
CDG_232	4/12/2011	4/27/2011	3.5	4	2.1	542586.952	613032.634		
CDG_232_10E	9/12/2011	9/20/2011	0	0.5	0.62	542597.234	613034.059		
CDG_232_10N	9/12/2011	9/20/2011	0	0.5	0	542585.574	613042.912		
CDG_232_5E	9/12/2011	9/16/2011	0	0.5	97	542592.781	613034.471		
CDG_232_5E	9/12/2011	9/19/2011	1	1.5	0.25	542592.781	613034.471		
CDG_232_5N	9/12/2011	9/15/2011	0	0.5	29	542588.2	613027.338		
CDG_232_5S	9/12/2011	9/15/2011	0	0.5	19	542583.47	613031.441		
CDG_232_5W	9/12/2011	9/15/2011	0	0.5	25	542586.562	613037.282		
CDG_247	4/11/2011	4/25/2011	2	2.5	0	542587.345	612969.419		
CDG_247	4/11/2011	4/15/2011	0	0.5	1.2	542587.345	612969.419		
CDG_255	4/11/2011	4/14/2011	0	0.5	0.26	542589.868	612937.878		
CDG_263	4/11/2011	4/20/2011	3.5	4	0	542606.935	612911.908		
CDG_263	4/11/2011	4/25/2011	2	2.5	0	542606.935	612911.908		
CDG_263	4/11/2011	4/15/2011	0	0.5	4.1	542606.935	612911.908		
BW-50	12/28/2010	1/4/2011	0	0.5	0.36	613208.777	542548.02	6.65	Standing Water
BW-51	12/28/2010	1/6/2011	0	0.5	2.4	613216.149	542589.707	7.11	Standing Water
BW-52	12/28/2010	1/4/2011	0	0.5	0.18	613154.164	542562.033	7.36	
BW-53	12/28/2010	1/6/2011	0	0.5	2.5	613150.578	542589.842	7.56	
BW-54	12/28/2010	1/6/2011	0	0.5	0.43	613095.918	542581.614	5.50	Standing Water
BW-55	12/28/2010	1/6/2011	0	0.5	0.23	613085.03	542601.097	5.77	Standing Water
BW-56	12/28/2010	1/6/2011	0	0.5	74	613042.105	542593.013	6.62	Standing Water
BW-57	12/28/2010	1/6/2011	0	0.5	0.62	613045.005	542623.421	6.49	Standing Water
BW-58	12/28/2010	1/6/2011	0	0.5	0.15	612990.317	542601.292	6.37	Standing Water
BW-59	12/28/2010	1/6/2011	0	0.5	0.15	612979.434	542623.556	6.60	Standing Water
BW-60	12/28/2010	1/6/2011	0	0.5	0.34	612910.214	542620.918	5.87	
BW-61	12/28/2010	1/6/2011	0	0.5	0.75	612906.617	542643.167	6.46	
BW-66	12/28/2010	1/9/2011	0	0.5	5.7U	613264.194	542387.192	11.19	
BW-66A	2/15/2011	2/22/2011	0	0.5	0.038U	613267.758	542382.814	11.16	
BW-66B	2/15/2011	2/22/2011	0	0.5	0.047U	613271.095	542385.879	10.85	
BW-66C	2/15/2011	2/22/2011	0	0.5	0.04U	613269.818	542391.268	10.96	
BW-67	12/28/2010	1/6/2011	0	0.5	0.11U	613259.288	542405.445	11.07	Standing Water
BW-P	6/21/2010	6/29/2010	0	0.5	4.3U	613330.007	542299.9894	9.76	
BW-Q	6/21/2010	6/29/2010	0	0.5	0.18U	613274.4614	542363.0848	11.30	
BW-R	6/21/2010	6/29/2010	0	0.5	0.23	613261.504	542539.961	6.79	
BW-S	6/21/2010	6/29/2010	0	0.5	2.9	613151.384	542548.208	6.97	
BW-T	6/21/2010	6/29/2010	0	0.5	0.24	613058.57	542570.956	6.60	
BW-U	6/21/2010	6/30/2010	0	0.5	0.54	612955.889	542596.851	6.26	
BW-W	6/21/2010	6/29/2010	0	0.5	0.36	613212.374	542545.812	6.26	
BW-X	6/21/2010	6/30/2010	0	0.5	1	613096.771	542562.412	7.09	
BW-Y	6/21/2010	6/29/2010	0	0.5	27	613011.017	542582.514	6.29	
BW-Z	6/21/2010	6/29/2010	0	0.5	0.37	612904.996	542606.472	6.40	
CDG_112	3/24/2011	3/29/2011	3.5	4	0.036U	613388.192	542617.949		
CDG_112	3/24/2011	4/6/2011	0	0.5	2.14	613388.192	542617.949		
CDG_112	3/24/2011	4/12/2011	2	2.5	0.057U	613388.192	542617.949		
CDG_141	3/29/2011	4/6/2011	0	0.5	5.86	613300.112	542563.325		
CDG_141	3/29/2011	4/17/2011	2	2.5	2.23	613300.112	542563.325		
CDG_141	3/29/2011	4/1/2011	3.5	4	0.035U	613300.112	542563.325		
CDG_163	3/31/2011	4/8/2011	0	0.5	0.266	613254.477	542854.871		
CDG_163	3/31/2011	4/7/2011	2	2.5	11.1	613254.477	542854.871		

Table 1
Summary of Historic PCB Sampling and Analytical Results
Lead Berm Area with Hatco Co-Located PCBs
Former Nuodex Corporation Site

Sample Location Designation	Sample Date	Analysis Date	Sample Begin Depth (feet bgs)	Sample End Depth (feet bgs)	Total PCB Concentration (PPM)	Easting Coordinate	Northing Coordinate	Elevation (feet bgs)	Notes
CDG_163	3/31/2011	4/7/2011	3.5	4	11	613254.477	542854.871		
CDG_232_10S	9/14/2011	9/20/2011	1	1.5	2.32	613022.331	542589.343		
CDG_232_10S	9/14/2011	9/24/2011	2	2.5	0.328	613022.331	542589.343		
CDG_232_10S	9/14/2011	9/20/2011	0	0.5	1.83	613022.331	542589.343		
E7	12/11/1985	NA	0	1	0U	612465.3176	541477.1967		
EB2	8/13/2009	8/19/2009	0	0.5	0.086J	613383.77	542498.779	11.23	
EB2	8/13/2009	8/19/2009	1	1.5	0.0098J	613383.77	542498.779		
EB2	8/13/2009	8/19/2009	2	2.5	0.0063U	613383.77	542498.779		
EB2	8/13/2009	8/19/2009	3	3.5	0.0062U	613383.77	542498.779		
EB3	8/13/2009	8/19/2009	1	1.5	0.0081J	613289.511	542518.175		
EB3	8/13/2009	8/19/2009	2	2.5	0.0057U	613289.511	542518.175		
EB3	8/13/2009	8/19/2009	0	0.5	0.17	613289.511	542518.175	4.65	
EB3	8/13/2009	8/19/2009	3	3.5	0.006U	613289.511	542518.175		
EB4	8/13/2009	8/20/2009	3	3.5	0.0064U	613195.661	542545.901		
EB4	8/13/2009	8/19/2009	0	0.5	0.61	613195.661	542545.901	7.67	
EB4	8/13/2009	8/19/2009	1	1.5	0.27	613195.661	542545.901		
EB4	8/13/2009	8/19/2009	2	2.5	0.02J	613195.661	542545.901		
EB5	8/13/2009	8/20/2009	3	3.5	0.0077U	613095.936	542560.835		
EB5	8/13/2009	8/20/2009	2	2.5	0.0064U	613095.936	542560.835		
EB5	8/13/2009	8/20/2009	0	0.5	2.1	613095.936	542560.835	6.53	
EB5	8/13/2009	8/20/2009	1	1.5	0.029	613095.936	542560.835		
EB6	8/13/2009	8/20/2009	0	0.5	1.1	613000.949	542582.455	6.58	
EB6	8/13/2009	8/20/2009	1	1.5	0.9	613000.949	542582.455		
EB6	8/13/2009	8/20/2009	2	2.5	0.015J	613000.949	542582.455		
EB6	8/13/2009	8/20/2009	3	3.5	0.052	613000.949	542582.455		
EB7	8/13/2009	8/20/2009	3	3.5	0.0092J	612908.858	542608.001		
EB7	8/13/2009	8/20/2009	0	0.5	1.1	612908.858	542608.001	6.19	
EB7	8/13/2009	8/20/2009	1	1.5	0.44	612908.858	542608.001		
EB7	8/13/2009	8/20/2009	2	2.5	0.034	612908.858	542608.001		
EB8	8/13/2009	8/20/2009	3	3.5	0.0076U	612816.778	542632.876		
EB8	8/13/2009	8/20/2009	2	2.5	0.03	612816.778	542632.876		
EB8	8/13/2009	8/20/2009	1	1.5	0.015J	612816.778	542632.876		
EB8	8/13/2009	8/20/2009	0	0.5	0.54	612816.778	542632.876	6.13	
NAPL-D	6/11/2010	7/3/2010	1	1.5	1.274	613396.2323	542573.0805	6.28	
NAPL-E	6/11/2010	7/3/2010	1	1.5	0.706	613347.8682	542595.4848	6.41	
WoWe-1	5/12/2009	5/20/2009	0	0.5	0.0239	613241.312	542425.627	12.72	
WoWe-2	5/12/2009	5/20/2009	0	0.5	0.0437	613339.668	542425.426	11.48	
WoWe-3	5/12/2009	5/20/2009	0	0.5	6.14	613164.995	542514.748	11.23	
WoWe-4	5/12/2009	5/20/2009	0	0.5	0.107	613245.12	542506.243	10.26	
WoWe-5	5/12/2009	5/20/2009	0	0.5	0.0412	613339.463	542325.342	13.54	
WoWe-6	5/12/2009	5/20/2009	0	0.5	0.0356U	613390.297	542244.614	15.48	
WoWe-7	5/12/2009	5/20/2009	0	0.5	0.004U	613466.899	542294.5	10.84	
WoWe-8	5/12/2009	5/20/2009	0	0.5	0.0042U	613499.907	542402.856	10.99	
SED-9	12/17/1998	NA	0	0.5	0.11	613374.4727	542653.1128		
PFP-7	8/21/2009	8/29/2009	0	0.5	84	613339.647	542602.19	5.93	

Notes:
Dup - Duplicate
MS/DS - Matrix Spike/Matrix Spike Duplicate
PPM - Part per million
bgs - below ground surface
= Total PCB concentration greater than the New Jersey Non-Residential Soil Remediation Standard of 1 ppm
NA- historic data, information not available

Table 2
Summary of Pre-Excavation PCB Sampling and Analytical Results
Lead Berm Area with Hatco Co-Located PCBs
Former Nuodex Corporation Site

Sample ID	Sample Designation	Depth		Date Sampled	Date Analyzed	Total PCB's (PPM)	Notes
		Top (feet bgs)	Bottom (feet bgs)				
JB1446-13	A13	0.5	1.0	3/12/2012	3/13/2012	ND	Dup
JB1446-28	A13	0.5	1.0	3/12/2012	3/13/2012	0.176	
JB1446-14	A13	1.0	1.5	3/12/2012	3/13/2012	0.569	
JB1446-15	A13	1.5	2.0	3/12/2012	3/13/2012	0.201	
JB1446-7	A14	0.5	1.0	3/12/2012	3/13/2012	ND	
JB1446-1	A15	0.0	0.5	3/12/2012	3/13/2012	0.722	
JB1446-2	A15	0.5	1.0	3/12/2012	3/13/2012	11.8	
JB1446-3	A15	1.0	1.5	3/12/2012	3/13/2012	1.78	
JB1141-1	A16	0.0	0.5	3/8/2012	3/9/2012	ND	
JB1289-1	B02	0.5	1.0	3/9/2012	3/12/2012	ND	
JB1446-22	B09	0.5	1.0	3/12/2012	3/13/2012	ND	
JB1446-23	B09	1.0	1.5	3/12/2012	3/13/2012	ND	
JB1446-24	B09	1.5	2.0	3/12/2012	3/13/2012	0.631	
JB1446-16	B10	0.5	1.0	3/12/2012	3/13/2012	ND	
JB1446-10	B11	0.5	1.0	3/12/2012	3/13/2012	1.37	
JB1446-11	B11	1.0	1.5	3/12/2012	3/16/2012	0.486	
JB1141-6	B12	0.5	1.0	3/8/2012	3/9/2012	3.98	
JB1515-1	B12	1.0	1.5	3/13/2012	3/14/2012	0.275	
JB1446-4	B15	0.0	0.5	3/12/2012	3/13/2012	ND	MS/MSD
JB1289-4	C02	0.5	1.0	3/9/2012	3/12/2012	ND	
JB1289-5	C02	1.0	1.5	3/9/2012	3/12/2012	2.07	
JB1289-6	C02	1.5	2.0	3/9/2012	3/12/2012	0.998	
JB1515-9	C05	0.5	1.0	3/13/2012	3/15/2012	3.58	
JB1515-10	C05	1.0	1.5	3/13/2012	3/17/2012	4.31	
JB1515-6	C06	0.5	1.0	3/13/2012	3/15/2012	4.94	Dup
JB1515-5	C06	0.5	1.0	3/13/2012	3/15/2012	3.99	
JB1515-7	C06	1.0	1.5	3/13/2012	3/16/2012	1.79	
JB1515-3	C07	0.0	1.0	3/13/2012	3/14/2012	0.591	
JB1446-25	C08	0.5	1.0	3/12/2012	3/13/2012	0.807	
JB1446-19	C09	0.5	1.0	3/12/2012	3/13/2012	7.35	
JB1446-20	C09	1.0	1.5	3/12/2012	3/13/2012	ND	
JB1446-21	C09	1.5	2.0	3/12/2012	3/13/2012	ND	
JB1289-13	D02	0.5	1.0	3/9/2012	3/12/2012	10.3	
JB1289-14	D02	1.0	1.5	3/9/2012	3/14/2012	7.4	
JB1289-15	D02	1.5	2.0	3/9/2012	3/16/2012	5.65	
JB1289-7	D03	0.5	1.0	3/9/2012	3/12/2012	6.76	
JB1289-8	D03	1.0	1.5	3/9/2012	3/14/2012	5.21	
JB1289-9	D03	1.5	2.0	3/9/2012	3/16/2012	4.68	
JB1289-16	D04	0.5	1.0	3/9/2012	3/12/2012	3	
JB1289-17	D04	1.0	1.5	3/9/2012	3/12/2012	2.32	
JB1289-18	D04	1.5	2.0	3/9/2012	3/13/2012	2.73	
JB1141-2	D06	0.5	1.0	3/8/2012	3/9/2012	4.13	Dup
JB1141-5	D06	0.5	1.0	3/8/2012	3/9/2012	0.991	
JB1141-3	D06	1.0	1.5	3/8/2012	3/9/2012	0.0488	
JB1141-4	D06	1.5	2.0	3/8/2012	3/9/2012	ND	
JB1289-10	E01	0.0	0.5	3/9/2012	3/12/2012	ND	

Notes:
Dup - Duplicate
MS/DS - Matrix Spike/Matrix Spike Duplicate
PPM - Part per million
bgs - below ground surface
= Total PCB concentration greater than the New Jersey Non-Residential Soil Remediation Standard of 1 ppm

Table 3
Proposed Management Plan
Co-located Lead and PCB Impacts: Excavation and Disposal Scenarios

Item Number	Soil Description	Lead Concentrations (ppm)	PCB Concentration (ppm), a	Approximate Quantity (cy), b	Approximate Quantity (tons), b, c	Action	Responsible Party	Comment
1	Soils with Lead (any concentration) and PCBs >50 ppm	Any concentration	>50 and <500	14	22.4	Pre-Excavate Hot Spot & Dispose Off-Site	Weston	Weston to manage and dispose of this material under their work plan
2	Soils with Lead Concentrations above RAC and visual slag and/or battery casings, with PCBs <50 ppm	> 21,000	< 50	363	581	Excavate top 6-inches & Dispose Off-Site	EPEC	Landfill can accept RAC Lead and PCBs up to 50 ppm
3	Soils with Lead Concentrations below RAC and above NRDCSRS, with PCBs <50 ppm and known to exceed >1 ppm, the NRDCSRS	<21,000 and >800	Known >1 and <50	42	67.2	Excavate PCBs known to be >1 ppm (10' by 10' by 1' deep areas), place in temporary stockpile for off-site disposal. Remove all PCBs >1 ppm prior to excavating Lead >800 ppm	EPEC/Weston	PCBs known to be >1 ppm (at sample point). Excavate a 10-feet by 10-feet area around sample point to a 1-foot depth and place in stockpile area for off-site disposal. Additional PCB impacted areas may be identified as part of the Pre-Investigation activities.
Lead Soil Impacts Outside Proposed Hydraulic Barrier Wall and Soil Cover (PCBs cleared to below 1 ppm)								
4	Soils with Lead Concentrations below RAC and above NRDCSRS, with PCBs removed to <1 ppm, the NRDCSRS	<21,000 and >800	<1	2866	4585.6	Excavate remaining Lead impacted material and place inside hydraulic barrier wall beneath the soil cover.	EPEC	Lead impacts that reside outside the proposed barrier wall alignment with known PCBs >1 ppm removed and cleared will be excavated and direct placed within the hydraulic barrier wall beneath the soil cover.
Lead/PCB Soil Impacts Inside Proposed Hydraulic Barrier Wall and Soil Cover								
5	Soils with Lead <21,000 ppm, with PCBs removed to <1 ppm, the NRDCSRS	<21,000	<1	NA	NA	PCB delineation will be cleared as a part of the pre-PCB investigation activities and therefore the lead can be left in place.	EPEC	PCBs will be pre-cleared and removed, and Lead will be confirmed to be < 21,000 ppm. Material can then be left in place.
Total:				3285	5234			

Notes:

RAC = Remedial Action Criteria (Site Specific Acute Toxicity Concentration - 21,000 ppm)

NRDCSRS = Non-residential direct soil contact soil remediation standard

Lead NRDCSRS = 800 ppm

PCB NRDCSRS = 1 ppm

ppm = parts per million

NA = Data and/or quantity not available do to lack of delineation. Lead confirmation sampling will be conducted to verify lead is removed to below the NRDCSRS.

a. The approved Soil Re-Use Plan and Materials Acceptance Plan allows for the consolidation of PCBs less than 1 ppm on-site within the hydraulic barrier wall beneath the soil cover.

b. Quantities of Lead and PCBs requiring further remedial action are estimated based on the current available data. Actual quantities may vary based on field conditions.

c. Conversion Factor used to convert from CY to Tons is 1.6 ton/CY.

Table 3
Proposed Management Plan
Co-located Lead and PCB Impacts: Excavation and Disposal Scenarios

Item Number	Soil Description	Lead Concentrations (ppm)	PCB Concentration (ppm), a	Approximate Quantity (cy), b	Approximate Quantity (tons), b, c	Action	Responsible Party	Comment
1	Soils with Lead (any concentration) and PCBs >50 ppm	Any concentration	>50 and <500	14	22.4	Pre-Excavate Hot Spot & Dispose Off-Site	Weston	Weston to manage and dispose of this material under their work plan
2	Soils with Lead Concentrations above RAC and visual slag and/or battery casings, with PCBs <50 ppm	> 21,000	< 50	363	581	Excavate top 6-inches & Dispose Off-Site	EPEC	Landfill can accept RAC Lead and PCBs up to 50 ppm
3	Soils with Lead Concentrations below RAC and above NRDCSRS, with PCBs <50 ppm and known to exceed >1 ppm, the NRDCSRS	<21,000 and >800	Known >1 and <50	42	67.2	Excavate PCBs known to be >1 ppm (10' by 10' by 1' deep areas), place in temporary stockpile for off-site disposal. Remove all PCBs >1 ppm prior to excavating Lead >800 ppm	EPEC/Weston	PCBs known to be >1 ppm (at sample point). Excavate a 10-foot by 10-foot area around sample point to a 1-foot depth and place in stockpile area for off-site disposal. Additional PCB impacted areas may be identified as part of the Pre-Investigation activities.
Lead Soil Impacts Outside Proposed Hydraulic Barrier Wall and Soil Cover (PCBs cleared to below 1 ppm)								
4	Soils with Lead Concentrations below RAC and above NRDCSRS, with PCBs removed to <1 ppm, the NRDCSRS	<21,000 and >800	<1	2866	4585.6	Excavate remaining Lead impacted material and place inside hydraulic barrier wall beneath the soil cover.	EPEC	Lead impacts that reside outside the proposed barrier wall alignment with known PCBs >1 ppm removed and cleared will be excavated and direct placed within the hydraulic barrier wall beneath the soil cover.
Lead/PCB Soil Impacts Inside Proposed Hydraulic Barrier Wall and Soil Cover								
5	Soils with Lead <21,000 ppm, with PCBs removed to <1 ppm, the NRDCSRS	<21,000	<1	NA	NA	PCB delineation will be cleared as a part of the pre-PCB investigation activities and therefore the lead can be left in place.	EPEC	PCBs will be pre-cleared and removed, and Lead will be confirmed to be < 21,000 ppm. Material can then be left in place.
Total:				3285	5234			

Notes:

RAC = Remedial Action Criteria (Site Specific Acute Toxicity Concentration - 21,000 ppm)

NRDCSRS = Non-residential direct soil contact soil remediation standard

Lead NRDCSRS = 800 ppm

PCB NRDCSRS = 1 ppm

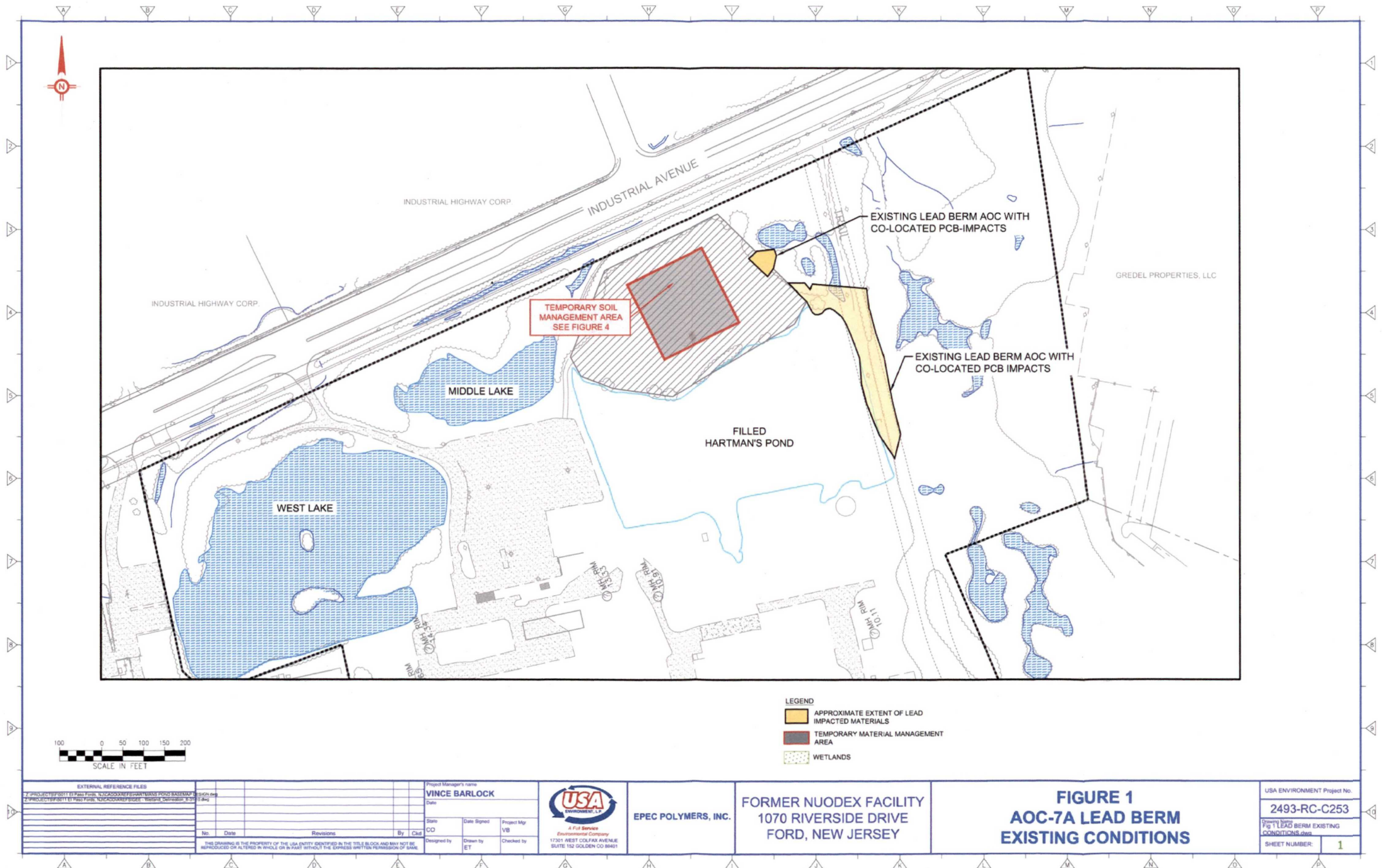
ppm = parts per million

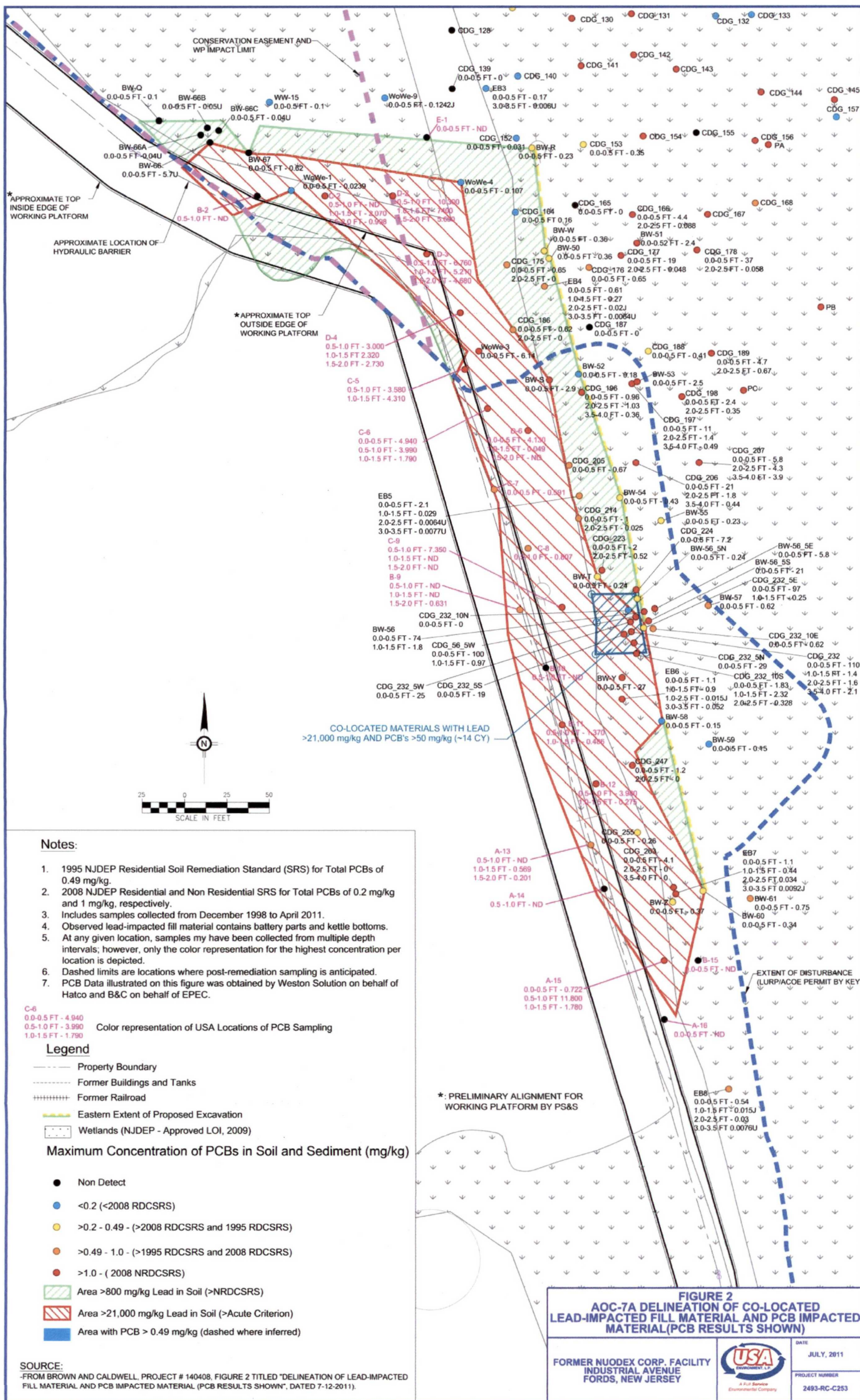
NA = Data and/or quantity not available do to lack of delineation. Lead confirmation sampling will be conducted to verify lead is removed to below the NRDCSRS.

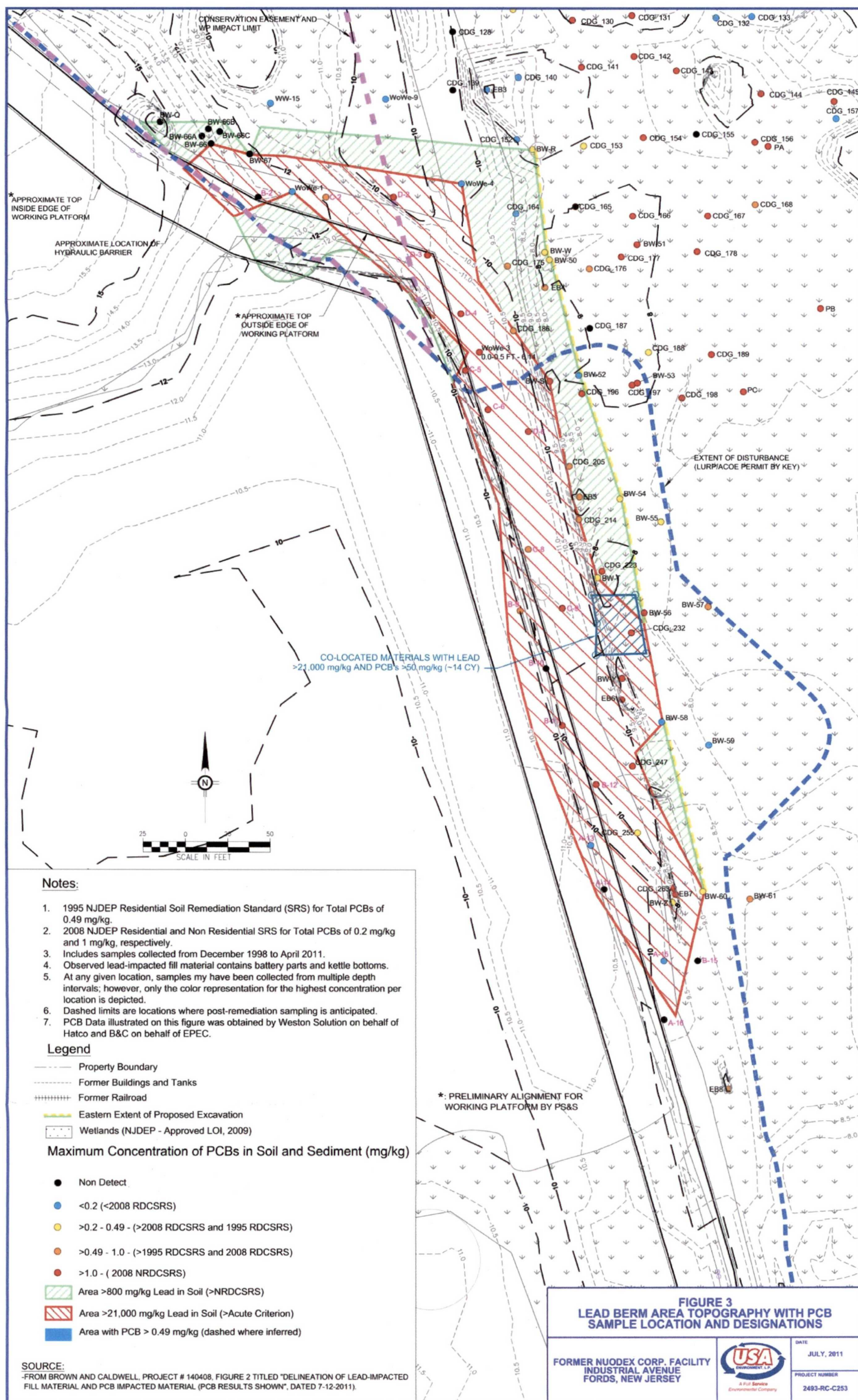
a. The approved Soil Re-Use Plan and Materials Acceptance Plan allows for the consolidation of PCBs less than 1 ppm on-site within the hydraulic barrier wall beneath the soil cover.

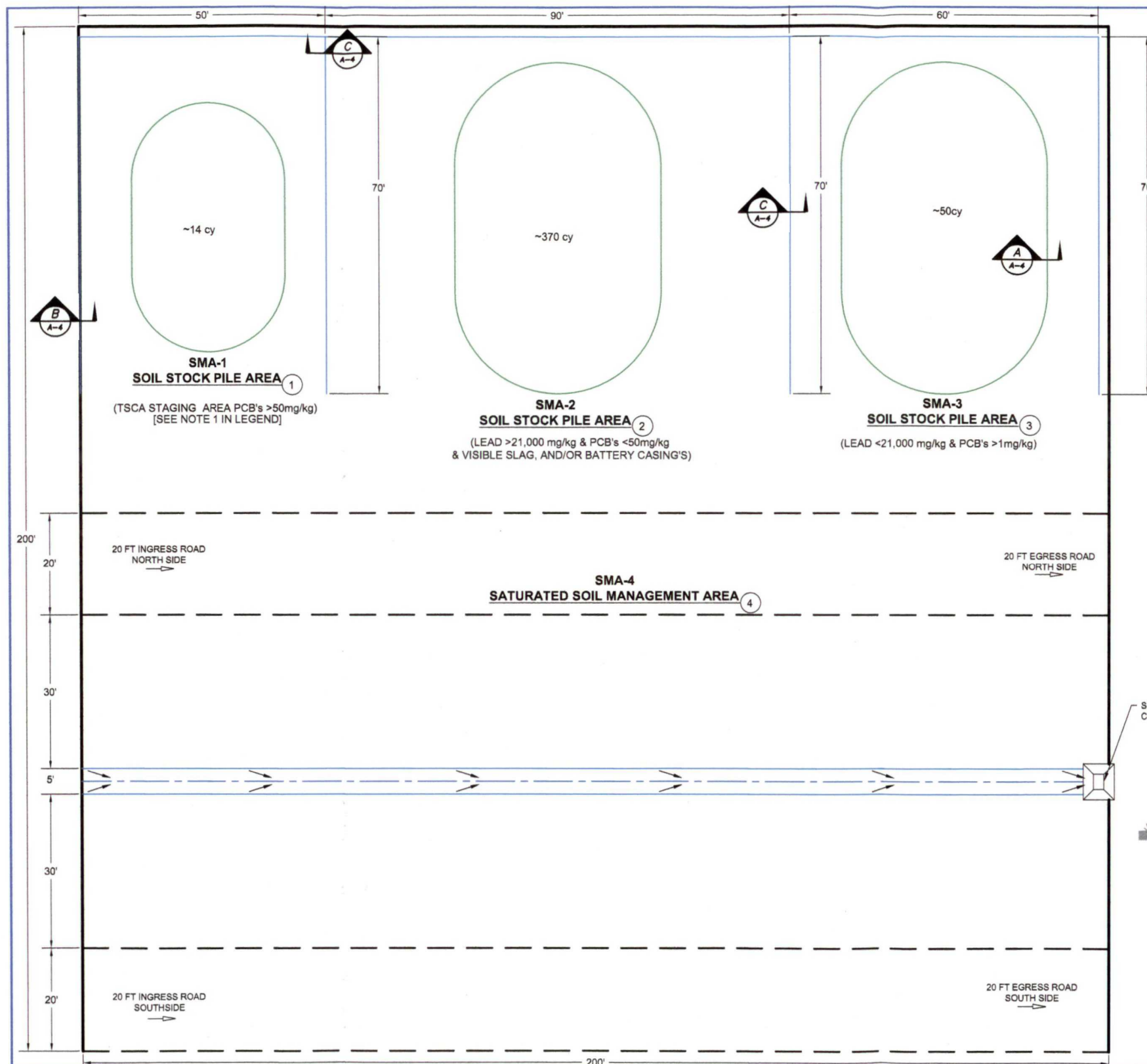
b. Quantities of Lead and PCBs requiring further remedial action are estimated based on the current available data. Actual quantities may vary based on field conditions.

c. Conversion Factor used to convert from CY to Tons is 1.6 ton/CY.





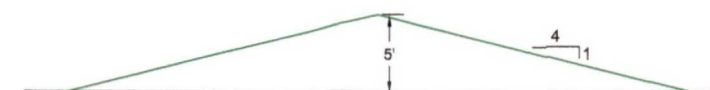




LEGEND

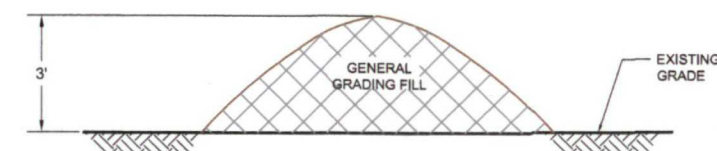
NOTE:

1. TSCA PCB's MAY BE PLACED IN ROLL OFFS AND/OR STOCKPILED IN SMA-1 AS PREFERRED BY WESTON.



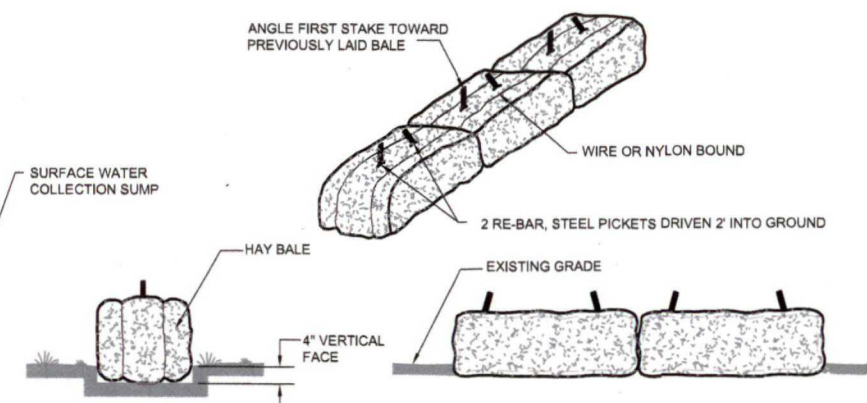
SOIL STOCK PILE CROSS-SECTION (4:1 SLOPE)

DETAIL A
A-4



SEDIMENT BARRIER - SOIL BERM DETAIL

DETAIL B
A-4



SEDIMENT BARRIER - HAY BALE DETAILS

DETAIL C
A-4

SCALE: N.T.S.

HAY BALES NOTES:

1. BALES SHALL BE SECURELY TIED AND STAKED ON THE CONTOUR.
2. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
3. EACH BALES SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES.
4. BALES SHALL SECURELY ANCHORED IN PLACE BY TWO STAKES OR RE-BARS DRIVEN THROUGH EACH BALE THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.

USA ENVIRONMENT Project No.

2493-RC-C253

Drawing Name

FIG 4 AOC-7A LEAD SOIL MAN

SHEET NUMBER: 4

EXTERNAL REFERENCE FILES			
No.	Date	Revisions	By

Project Manager's name			
VINCE BARLOCK			
Date			
October, 2011			
State	Date Signed	Project Mgr.	
CO		VB	
Designed by	Drawn by	Checked by	
	ET		

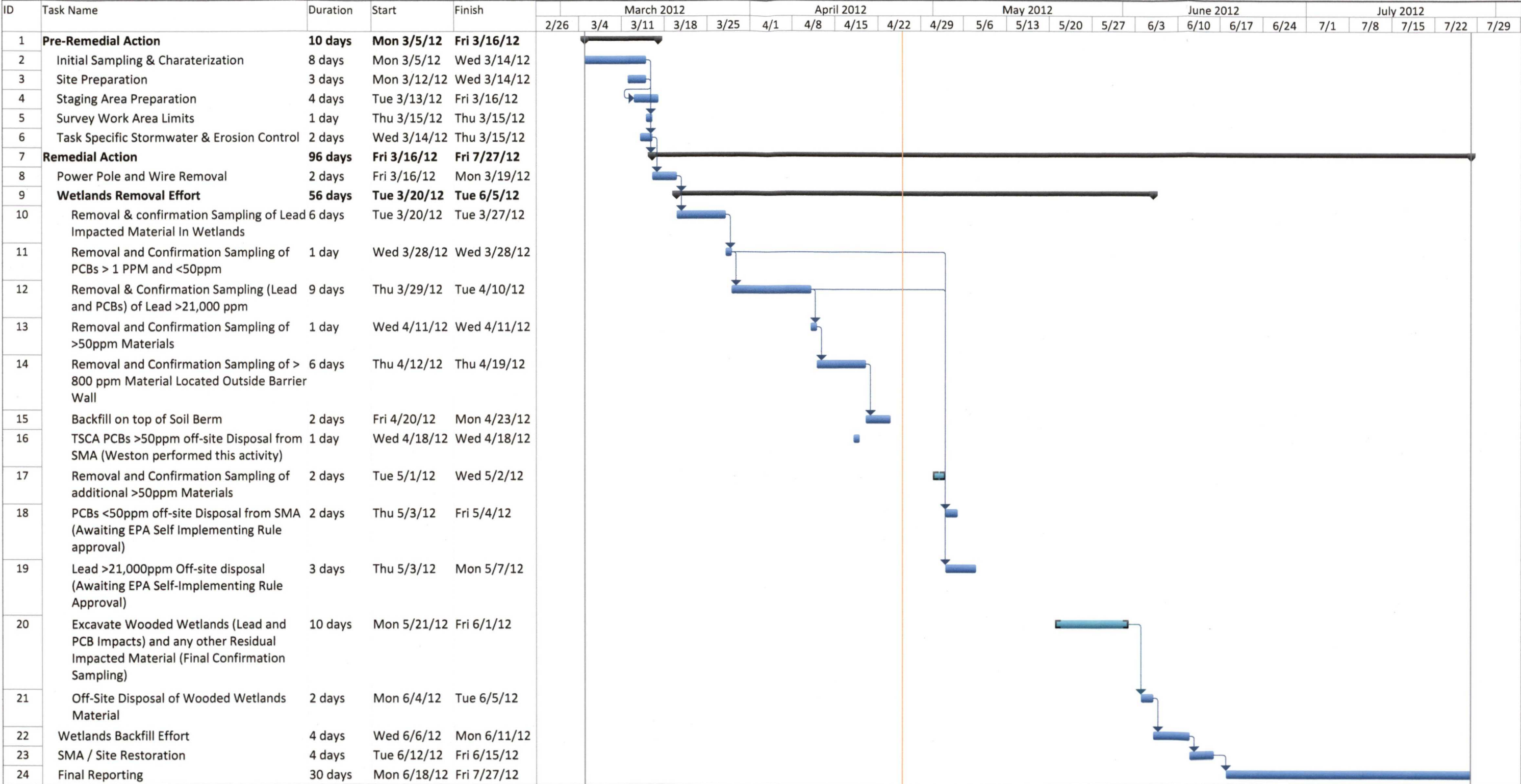


EPEC POLYMERS, INC.

FORMER NUODEX FACILITY
1070 RIVERSIDE DRIVE
FORD, NEW JERSEY

**FIGURE 4
PROPOSED SOIL MANAGEMENT AREA
AOC-7A LEAD BERM**

Figure 6
Lead Berm/PCBs Area Remedial Action
Former Nuodex Facility



Project: Lead Berm Area w_PCBs R
Date: Thu 4/26/12

Task

Split

Milestone

Summary

Project Summary

External Tasks

External Milestone

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

Deadline

Progress